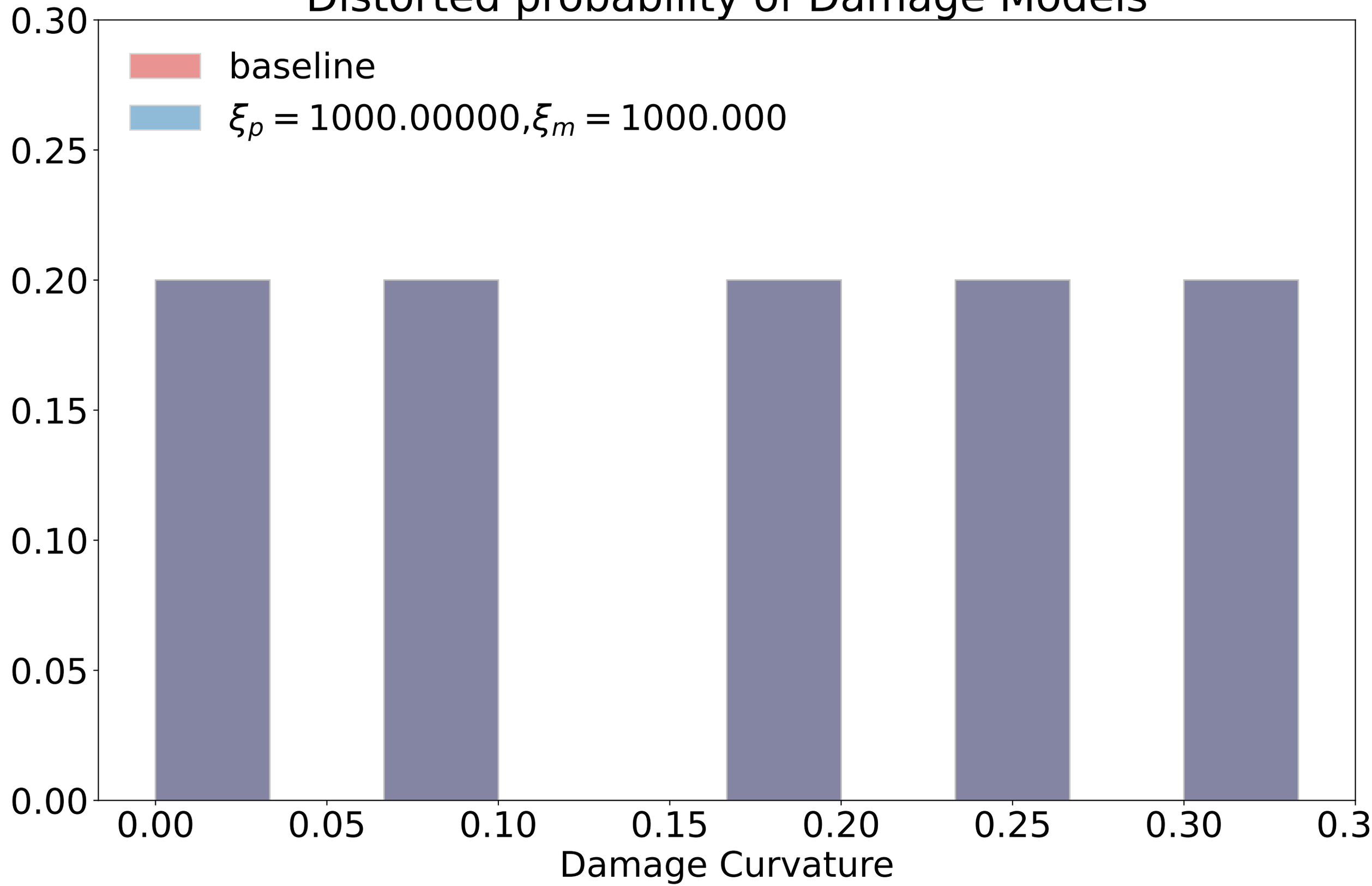Distorted probability of Damage Models